DENVER PC BOARDWATCH

NEWSLETTER FOR ELECTRONIC BULLETIN BOARDS AND ON-LINE SERVICES

TELE-BITS

THE BBS LIST
This month **Denver PC Boardwatch** presents a list of **240** bulletin boards and on-line services available in area code **303** - see page 12. A total of **11** BBS were deleted from the December list while **19** new boards were added for a net gain of **8**. As always, each number was verified by actual telephone contact resulting in a modem connect. We also present a new landscaped list format this month with additional columns for BBS software, city, and system operator. Additions since last month are highlighted in bold face type. Corrections can be addressed via the Denver PC Boardwatch Echomail Conference on **TERUS PUBLIC BBS 104/43 (303)469-7161**, by Fidonet Mail addressed to **MARION RICKARD** via Net **104** Node **30**, or to **M.RICKARD** on the General Electric **GEnie** information service.

AREA CODE CHANGE
At the present time, Colorado is one of **25** states sporting a single area code - in this case **303** - while the other **25** states all have at least two area codes. California features the largest number with eight codes and Texas follows with six. As reported in our April '87 issue, Colorado will contain two area codes effective **March 5, 1988** - effectively destroying the **50/50** split among states. The southern portion of the state including **Colorado Springs, Pueblo**, and **Leadville** will receive the new **719** area code designation while the northern half of the state will remain area code **303**.

ZIP CODE ASSISTANCE
In the past, telephone information operators would provide telephone numbers but not addresses. We were surprised to find they will now give you the directory address as well. But, the directory address does not include zip code. Fortunately, the US Postal Service can help. To find out the zip code for any address dial US Postal Information at **(303)297-6000**. There are now **29,344** post offices in the United States.

DEEP DISCOUNT ON NEW IBM PS/2 MACHINES
Arapahoe Community College has announced a discount program on selected **IBM PS/2** computers for students, faculty, and staff. Discounts of **40%** and In some cases more are available on IBM models **50, 60**, and **80**. A model **50** system unit with **1 MB RAM** nor-mally lists for **$3595**. With the discount program, students can pick one up for **$2157** - a very attractive price. Arapahoe Community College 5900 South Santa Fe Drive, Littleton, CO; **(303)797-5741** (computer lab).

TELEPHONE EXTENSION CUTOFF
Data Spec Corporation is marketing a device they call a **Data Interrupt Eliminator**. It effectively cuts off all extension phones in the house whenever you pick up the equipped telephone. This not only ensures conversational privacy, but also that modem file transfers are not aborted by one of the kids playing the kazoo into the upstairs extension - hence the name of the device. Data Spec Corporation, 20120 Plummer St., P.O. Box 4029, Chatsworth, CA 91313;**(818)701-5848**.

BY THE NUMBERS
A local Wheat Ridge Colorado firm has converted a variety of public domain statistical and demographic data available from the US Government into formats for the Lotus 1-2-3 spreadsheet program, dBaseII/III+, and Reflex database programs. The **10 MB** database comes on **30** floppy diskettes and contains extracts from the 1987 Statistical Abstract of the United States and the 1986 State and Metropolitan Data Book published by the US Census Bureau. The package is titled **THE NATION's NUMBERS** and lists for **$300**. A version for the Apple Macintosh is in the works now. The database contains **2.6** million items on all **50** states, **2000** counties, and **6000** cities. Gene Essman & Associates, PO Box 1982, Wheat Ridge, CO 80034 ;**(303)933-0765**.

NBS TIME SERVICE ON-LINE
The **National Bureau of Standards Time/Frequency Division** in Boulder Colorado inaugurates a new and welcome time service as of **January 1, 1988**. The service allows personal computer owners who have a modem to dial up NBS by telephone and connect their PCs to the Master Clock in Boulder; allowing retrieval of the correct **Universal Coordinated Time** (UTC) in ASCII text format. The Universal Time Act legally establishes the US Department of Commerce National Bureau of Standards as the official time standard for all civilian activities in the United States.

The new NBS data service operates at a speed of 1200 bps using **8** data bits, No parity, and **1** stop bit **(8N1)**. It's available at **(303)494-4774**, **(303)494-4775**,

and **(303)494-4776** - a local call from all Denver telephone exchanges. Each number has its own Time Code Generator tied to the **NBS 9** cesium beam atomic frequency standard used as a time base at NBS. **This "atomic clock" is accurate to one second in 300,000 years**. Users who dial the service and connect via modem will receive an ASCII text string emitted each second with an asterisk time mark. The string is repeated for at least ten seconds with automatic disconnect occurring at **55** seconds. The string contains a wealth of time information including modified Julian date, year, month, day, hour, second, leap second status, daylight savings time countdown, a correction factor termed **DUT1**, and a telephone line delay correction facton. Finally the characters **UTC(NBS)** followed by the asterisk time mark.

47096 87-10-28 16:28:13 00 1 0.4 007.9 UTC(NBS) *

The modified Julian date is the number of days occurring since noon, **January 1, 4713 B.C.** minus the constant **2,400,000.5**. (**47096** in the example string above). It's used quite a bit by astronomers and earth scientists since it maps a combination of earth, lunar, and solar cycles that repeat only at extremely long intervals (thousands of years).

The leap second status character will contain a **0, 1**, or **2** with **0** indicating no leap second activity; a **1** indicating a leap second will be added to **Universal Coordinated Time (UTC)** at the end of the current month; and a **2** indicating a second will be subtracted from **UTC** at the end of the month. Historically, a leap second has been added to the last month of each year to coordinate the atomic based **UTC** to the astronomically observed earth time (**UT1**) to within **9/10** second. This is necessary due to the current trend toward slower rotation of the planet. With the recent December **31, 1987** leap second added, **UTC** and **UT1** now lag **International Atomic Time (TAI)** by **24** seconds.

The daylight savings time countdown character will contain a two digit character indicating a countdown to the next change from **Mountain Standard Time (MST)** to **Mountain Daylight Savings Time (DST)** or back. A value of **00** indicates no change imminent. About **49** days prior to the change from **MST** to **DST** in the spring, the countdown from **99** to **50** begins with the change occurring at **50**. This occurs on the first Sunday in April - the 3rd of April this year at **2:00 A.M.** This flag will then remain at **50** until **49** days prior to the autumn change back to **MST**. It will then count down from **49** to **00** when local time falls back one hour - again at **2:00 AM**, to **MST**. This occurs the last Sunday of October - the 30th of the month in **1988**. The flag will then remain **00** until **49** days prior to the next change.

The **DUT1** correction factor consists of three characters containing the deviation in tenths of seconds between atomic based **UTC** time and the astronomically observed earth time **UT1**. The first character of the factor contains either **0** or a minus (-) sign indicating a leading or lagging time relationship respectively. The sign is followed by a decimal point and a single numeric value between **1** and **9** indicating the actual number of tenths of a second deviation.

The asterisk character (*) marks the exact instant when all information in the ASCII string is correct and so serves as the actual time mark. Unfortunately, the string itself is delayed in transmission through the telephone switching circuitry. This "line delay" can vary between **20-25** milliseconds (**0.020** seconds) for a local call up to **250-300** milliseconds (one-quarter second) for long distance calls routed via satellite. Fortunately, **Dick Davis**, the mind behind the Time Code Generator hardware, and **Marc Weiss**, who wrote the Z80 assembly language software for the service, have devised a very clever solution. They've built a delay correction algorithm into the service. To use this, simply echo the asterisk back to NBS immediately on receipt. When at least four of these echoes are received, the service will use these echoed characters to average the time between asterisk transmission and receipt of the echoed asterisks. This value is halved to produce a pretty close approximation of the one way delay time. The next transmitted string is corrected by this amount and the asterisk changed to the plus (+) character to signal the modification. The actual line delay in milliseconds is also posted in the ASCII string immediately preceding the characters **UTC(NBS)**. Using this technique with some efficient software and a relatively fast computer can allow synchronization of a PC to the NBS standard to the millisecond range. While not of the microsecond (millionths) accuracy that the people at NBS are fond of dealing with, this is considered adequate accuracy for most spreadsheet operations. With a very short software program and a minor change to your **AUTOEXEC.BAT** file, local front range residents can access the worlds most accurate PC clock calendar.

APPLE ON-LINE SERVICE
The latest in commercial on-line services features a familiar name. Apple Computer is sponsoring a dedicated on-line commercial service to provide news, product information, and technical support to Macintosh and Apple II owners. The service will actually be operated by **Quantum Computer Systems** of Vienna Virginia as a pay service.
At last count, Mr. Tom Oberlin, product manager at Quantum for the Apple service, was going to return

our call 9 times. His plodding, but at least thickly obstinate receptionist Kelly declined to comment, disavowed any knowledge of such a product, categorically denied knowledge of any plans for such service in the future, and was sure she would stick to that story until at least spring when Mr. Oberlin made an announcement himself if he ever got out of his never-ending meetings with the company "EL PRESIDENTE." She also preferred the name DENVER WHO? to our current DENVER PC BOARDWATCH - we'll consider it. With these people at the helm, we expect **marvelous** things from this service - about 1995. We'll keep you posted. Raspberries to you Kelly. Quantum Computer Systems, 8619 Westwood Center Dr., Vienna, VA 22180; (703)448-8700.

QUOTE OF THE MONTH
Real men don't have floppy disks.

OSI CONFERENCE IN DENVER
The Omnicom Istitute presents courses on the **Open Systems Interconnection (OSI)** standard **January 11-15** at Center City Marriott Hotel. The five day seminar includes classes on **Integrated Services Digital Network (ISDN)** and is aimed at consultants and technical managers. **ISDN** is the coming standard for digital telephone lines to be connected to your home. In the future, it will allow multiple voice calls, videophone, and very high speed (64 kbps) data transfer all simultaneously over a single line - no modem required. Southwestern Bell currently has four business customers on-line and expects to make residential ISDN hookups on a limited basis sometime this year. Omnicom Institute, (703)281-1135.

EQUAL ACCESS PREFIX CODES
In our September 1987 issue we featured a small list of equal access prefix codes. We've received a number of comments and several requests to repeat this item. After a bit of conferring with Mountain Bell, we found the original list was somewhat less than all inclusive. So, we've expanded it a bit. By way of background, when Judge Greene decreed that all long distance carriers be granted equal access to local customers, by default he granted all customers equal access to carriers. You may have selected a "primary" carrier at the behest of your telephone company. What they didn't tell you was that you can still make long distance calls from your home telephone using **any** long distance carrier serving your area and have the call billed on your regular Mountain Bell bill. No separate accounts or billing is required. To use the codes, rather than entering 1 plus the area code and the number to dial long-distance, enter the five digit access code, the area code, and the number. The call is then routed via the carrier specified by the five-digit code. Disadvantages? There is one. Apparently, it can take the telephone company as long as three months

to figure out who to bill for the call and place the item on your monthly bill. As a result, you might call grandma using one of these carriers and not be billed for it for two or three months....a notable tragedy.

LONG DISTANCE CARRIERS	
CARRIER	**PREFIX**
Midamerican Long Distance	10001
Compute-A-Call	10020
American Telephone Exchange	10050
Amnet	10053
Comnet, Inc.	10059
LEXITEL	10066
Western Union Telegraph	10220
MCI Telecommunications	10222
American Sharecom Inc.	10256
SunDial Communications	10263
Com-Systems Network Services	10266
ATS Communications	10287
AT&T Communications	10288
Call America	10300
American Network	10311
Northwest Telco	10312
Tel-Share	10330
US Sprint	10333
Touch America	10335
Proto-Col	10390
Tel-Net	10414
Allnet Communication Services	10444
Intelco	10465
ITC Networks	10468
ITT Long Distance	10488
Long Distance for Less	10535
LDX, Inc.	10539
Long Distance Communications	10607
Northwest Telcom	10638
Network Services	10675
NETTEL	10685
Tel-America	10700
Yavapai Telephone Exchange	10766
Tel Systems	10771
GTE Sprint Communications	10777
MidAmerica Long Distance	10801
Access Long Distance	10937
Telephone Communications Corp.	10977
Wylon	10995

TELEX CAPABLE MODEM
RCA Global Communications has introduced a **300/1200 bps** modem capable of receiving Telex messages as well as performing the normal modem duties such as playing Tradewars and Star Trek on-line. The **PC LINK** modem features **256K** of internal memory with battery backup and a serial printer port to print out messages if necessary. The unit can receive messages via the worldwide **Telex** network even when the

computer is turned off. A front panel LED will alert you to the presence of a message. The unit travels for **$390** list. RCA Global Communications Inc., 201 Centennial Ave., Piscataway, NJ 08854; **(201)885-2236.**

LASER SIGNATURES

Koch Software Industries has developed a service to allow you to add your personal signature or logo to laser printer generated documents. Basically, you mail them a sample of the desired art and specify the type of laser printer used (HP, Canon, Xerox, or Regal). They return a file containing a rasterized image along with a memory resident program titled Fontastik. Use your normal word processor to generate documents as usual. At the point where you want the signature or image to appear, enter \Zfilename@. When the document is printed, the signature will appear. The rasterized imaging process provides a full gray-scale image that appears quite realistic. Signatures are **$50** while logos up to 2 square inches are **$150** with a **$50** per square inch charge above 2 inches. The Fontastik program costs an additional **$100**. Koch Software Industries, 11 W. College Dr., Bldg-G, Arlington Heights, IL 60004; (800)634-5624.

MAC PORTABLE

A local Golden Colorado company has introduced an Apple-authorized portable Macintosh computer using internal circuit boards actually manufactured by Apple Computer Corp. The **Dynamac GP** features a **512-** row by **342-**column gas plasma display, one MB of RAM, an **800** KB disk drive, mouse, and a host of external connectors. The unit runs on AC and costs **$3995**. Internal hard drives, modems, and RAM expansions are available. Dynamac Computer Products Inc., 1536 Cole Blvd., Suite 252, Golden, CO 80401; **(303)233-7626.**

LOCAL ACCESS 303

RESEARCH SERVICE

Almost without exception, the documentation for commercial database programs such as R:base System V, dBaseIII+, etc., uses the analogy of the familiar library card catalog system to explain the basic concept of a computer database program. Some manuals even include a line drawing of the room-length wooden cabinets with the narrow card drawers - a single drawer pulled out and a card pulled halfway out of the drawer.

These things have a wonderful way of coming full circle. The **Colorado Association of Research Libraries (C.A.R.L.)** maintains their library card catalog system on a computer database. This is significant to telecomputing enthusiasts on two fronts:

1). The database is available on-line via modem to all using common dial-up telephone lines.

2). It's **free.**

The accompanying table lists **9** area code **303** telephone numbers where you can dial up, browse through your favorite local library catalog, and hang up with no connect-time charges, subscription fees, contributions, or even registration of your name and address. Numbers are provided for several local library systems. There is no complicated logon and when you are done, you simply drop carrier (hang up the phone) to logoff.

The system runs on computers at several locations cataloging separate library systems in Boulder, Longmont, Broomfield, all of the Denver Public Library system, Irving, and Colorado Springs. Despite this, operation of each system is largely identical and reasonably easy to learn. Most run on **Tandem** minicomputers and they run quite quickly with little noticeable delay in spite of searching through several hundred thousand entries.

To use the system, first select a library from the menu presented. The system then asks you to select a search method: title, author, or text. After the appropriate selection, a command line is presented for entry of search text. For example, entering **TEXT** as the search method and **TELECOMMUNICATIONS** as a search string would render a list of **63** items in the Denver Public Library covering telecommunications. By adding the additional search word **COMPUTER**, the list is narrowed to **7** entries. By selecting a particular entry from the list, the title, author, publisher, publication date, location (library branch where held), a brief synopsis of material covered, catalog number, and whether the book is currently checked out or not will be brought to the screen. You can request an interlibrary loan to have the book shipped to a library closer to home, and you can pick it up at the will-call desk by catalog number.

Obviously the text search function is the most powerful research tool available, but you can also search for a particular book by title, or list all the books on hand by a specific author.

We think the service is a laudable use of your tax dollars and an invaluable research aid - particularly for students. It is probably well worth the cost of a modest computer system and modem just to provide your school-age offspring access to this database. They can "shop" for the research materials they need from the living room, and stop by the library later to pick up the items. Additionally, it provides access to most of the libraries in the state rather than just the one three blocks away. The service provides more real on-line value than most commercial databases charging $100 hourly. If you haven't tried out **C.A.R.L** yet, your not getting the most from your modem. Our highest recommendation.

C.A.R.L SERVICES

LIBRARY	DATA LINE
Boulder Public Library	(303)444-2057
Boulder Public Library	(303)444-2074
Colorado Springs C.A.R.L.	(303)632-2194
Denver C.A.R.L.	(303)830-0519
Denver C.A.R.L.	(303)830-1165
Denver C.A.R.L.	(303)830-1546
Denver C.A.R.L.	(303)830-1547
Denver C.A.R.L.	(303)830-1548
Irving Library Network	(303)444-2115

DENVER PC BOARDWATCH ECHO AREA

Terus Corporation, a local software development firm, has started a local Fidonet Echomail conference titled **Denver PC Boardwatch**. The conference features announcements concerning new BBS in the Denver area as well as a forum for suggestions and comments concerning the **Denver PC Boardwatch Newsletter.** If you wish to contact us electronically, this is a good way to do it. If you are starting a new BBS, this would be a good place to announce it. Since we monitor the area - you will be quickly added to the printed list. And, you would likely garner a number of new users from among those who read the conference. The Echomail conference is accessible via **TERUS PUBLIC BBS 104/43** at (303)469-7161.

Additionally, it's carried by the local Fidonet boards listed below:

DENVER PC BOARDWATCH ECHO CONFERENCE

TITLE	DATA LINE
Arkham Public Library 104/48	(303)444-7686
Denver Metroplex 104/69	(303)455-3283
P2B2 S 104/51	(303)329-3337
Terus Public 104/43	(303)469-7161
This End Up 104/30	(303)430-1585

Sysops wishing to carry the **Denver PC Boardwatch Echomail** conference may do so by addressing Fido netmail to Todd Hill at **Net 104 Node 43**. Note that Terus' primary product, a natural language text processor titled **MINDS**, is currently available in a pre-release version. It may be downloaded from their public BBS. The program allows English language queries/searches of text files up to 32 MB in size.

DINOSAUR BOARD

Chris Anderson runs a somewhat unusual system up in Niwot Colorado. The board is titled **DINOSAUR BOARD** operating at **(303)652-3595**. The board specializes in support for outdated/obsolete personal computer systems - particularly the **TRS models I, III, and 4.** Mr. Anderson seems to have a pretty fair grip on where and how to get software and hardware for these geriatric desktops of seasoned vintage. The board itself runs on a **TRS80 Model III** with an early version of **TBBS** software. Of notable interest to adventure game connoisseurs: **DINOSAUR BOARD** has the most complete collection of adventure games available on-line that we've found anywhere. Virtually the entire **INFOCOMP** library of adventure games is available including **Zork I, II,** and **III, Planetfall,** and **Witness.** A total of ten games are featured. You may dial up, play your favorite, and save your status until you call again next time. This allows you to keep a running game going for months if need be.

AURORA MULTI-SYSTEM

Greg Kanis has made a sincere attempt to be all things to all people with his **AURORA MULTI-SYSTEM at (303)745-3414.** The board sports sub-boards for IBM, Atari, Apple, and Commodore **64/128** computers as well as for the Commodore Amiga machine the board operates on. Each sub-board is maintained by its own sub-sysop as well. Interesting concept - but we've never seen it work out too well. Boards that have tried this is the past have gravitated to one particular system or another fairly quickly. The real story on this board has nothing to do with it's multi-system orientation however. Recently a number of BBS have begun carrying digitized/scanned clip art along with programs allowing IBM compatible units to read Macintosh graphic files etc. Mr. Kanis has introduced a really useful adjunct to this trend. He asks his users to upload scanned photos of themselves and he makes the files, along with a program to read them, available for download. This could be a real enhancement to BBS communications. If boards kept digitized photos of users on-file, you would be able to get some sense of what the individual message writer looked like. Of course, as users caught on to how to use this, you might find an inordinate number of male users looking quite a bit like Tom Selleck or Ted Danson. Similarly, female users might seem to almost universally look like published photos of Kathleen Turner or Meryl Streep. And in every crowd, someone would upload a likeness remarkably reminiscent of Bloom County's OPUS. Nonetheless, the concept could add a much needed visual element to the use of BBS - and everyone could look like whoever they preferred.

TALKNET ON-LINE NEWSLETTER
Bob Connors runs a very attractive board in Colorado Springs he calls **WILDCAT!ORPHANAGE INTERNATIONAL** at (303)392-6631. An interesting element of this board is an on-line newsletter available for download titled **TALKNET**. The newsletter covers telecommunications issues and general items of interest to computer owners. The newsletter is available for distribution via other BBS around the country much in the fashion of Topeka based **INFO-MAT** electronic magazine (currently available on Terry Travis's **DENVER METROPLEX 104/69** at (303)455-3283). The **TALKNET** newsletter is also available over the **GEnie** commercial service in the BBS roundtable section. Bob also helps maintain a Colorado Springs list of BBS. We checked it out and it's not bad - not Boardwatch - but not bad.

WHAT IS FIDONET?
A number of new readers have asked what the numbers **104/xx** in the title of some BBS on the list indicate. Briefly, they are the unique net and node designators for BBS participating in a nationwide network of BBS termed Fidonet. Fidonet originally started out as a medium for exchanging messages and program files among three or four PC enthusiasts - among them: Tom Jennings. Mr. Jennings and his cohorts developed and improved a communications software program they called **FIDO**. The notable feature of the program was that it used the telephone system during the wee hours of the morning to swap messages and files among the participating computers automatically. This drastically reduced the telephone charges by using the system at the cheapest rate period. Since operation was quick and automatic, no operator intervention was necessary.

This network of three or four computers has grown into a nationwide net of over **2100** BBS with more overseas in Europe, Australia, and Japan. Messages and files are transferred via thousands of telephone calls each night. Special topic message areas termed **"Echomail Conferences"** flow from machine to machine literally across the nation with each added message "echoed" to the next machine in turn. Echomail conferences exist for science fiction fans, telecommunications in general, as support for specific software packages, for disabled/handicapped issues, consultants concerns, theology discussions, and over a hundred other subjects.

Obviously, the flow of telephone calls from one machine to another must be much better organized than it was when only three machines were involved. Today, this network is organized into zones, regions, networks, and nodes. The continental US is considered **Zone 1**. A region will cover a geographic area of the country. Colorado is located in **Region 15**.

Within regions, there may be several networks. Denver is served by **Net 104**. Colorado Springs is **Net 128**. Within each network, each BBS is assigned a node number. Oscar Barlow is the local **Net 104** coordinator and sysop of **MILE HI TECH BBS** at (303)973-9338. If you look at our listing, you will notice the **104/56** following the title. This indicates that Mr. Barlow's board is **NODE 56** in **NET 104**. As local network coordinator, Oscar assigns each local participating board a node number. In this way, each of the **2100** BBS in the country have a unique **NET/NODE** address.

Advantage of knowing the Net/Node address? For one thing, it serves as the address for sending **FIDOMAIL**. To send a message to an acquaintance in New Jersey, all you need is the Net/Node address of a Fidonet BBS in his area. Enter a message on a local Fidonet BBS here in Denver addressed to him by name and Net/Node. About **2:00** AM, the local BBS will look up the telephone number from the **National Nodelist** distributed to all Fidonet BBS each Friday. The system then automatically dials and delivers the message to the New Jersey board. Cost? About twenty cents.

SKI INFORMATION VIA BBS
As winter deepens, many turn to their PC and modem as an appropriate indoor activity while the snow falls and the skies darken. But once the flakes stop, it's time to shut down the PC, strap on a couple of 1x6 pine boards and go jump off a mountain somewhere. We are blessed not only with some of the best BBS in the country, but some of the best skiing as well. Several local boards supply info on both. The oldest and perhaps best known is Jay Melnick's **COLORADO TRAVELBANK BBS** at (303)671-7669. This board posts ski condition reports from virtually every ski area in Colorado updated daily by the ski areas themselves. Additionally, the board provides Colorado road condition reports from the highway patrol and ski industry news including occasional job openings at resorts. The board also lists special deals on ski rentals and lift tickets.

In the Colorado Springs area, **TIMBERLINE 128/27** at (303)380-0257 lists ski conditions around the state. Finally, for those skiers headed for Steamboat Colorado, the **STEAMBOAT INFORMATION BBS** at (303)879-6741 discusses local hotel and restaurant accomodations as well as local ski conditions in some fairly amazing detail.

LOCAL STATISTICS
This month we take a peek inside the **Denver PC Boardwatch** database to show you a bit about the makeup of the local BBS community. On the subject of hardware, we find a variety of systems in use from some early machines that probably started life as a card-loom somewhere to some of the latest Intel

80386 based machines. The only hardware we know of **NOT** sporting a BBS somewhere was a rather dated **REGINA** lightweight floor sweeper and a mid-twenties vintage **RCA Model 17 Radiola table model radio** on display down at **Quest Electronics.** And we've heard rumors that John Maxwell has been trying for weeks to get **OPUS** to run on that. For statistical purposes, we've wantonly categorized the local BBS by rather broad types to include IBM compatible units, Apple/Macintosh, Commodore, Atari, and All Other. Note that **All Other** is still a rather large category consisting of everything from old TRS80 Model IIIs and Osborne CP/M machines up to Tandem Minicomputers and DEC PDP 11s.

DENVER BBS HARDWARE		
TYPE	**NUMBER**	**PERCENT**
IBM	123	51.25%
Commodore/Amiga	36	15.00%
Apple/Mac/Franklin	30	12.50%
Atari/ST	13	5.41%
All Other	38	15.83%

As you can see, the IBM boards seem quite popular. In the software department, we had to be a bit more specific. Each different title of BBS software behaves slightly differently. The type of BBS software selected by the system operator plays a large role in the appearance, tone, and flavor of a particular BBS. Some users prefer the lightning speed and spartan utility of **TBBS** while others prefer the elaborate graphics and advanced file transfer protocols of an **OPUS** based board. The accompanying table lists BBS software in order of occurrence. The most common package is **OPUS** for the IBM followed by **C-NET** on the Commodore. Note that **FIDO** and **TBBS** software can also be found on a few machines classified as **All Other.** At least **8 TRS80** machines are still chugging along using **TBBS** software as well.

IBM BBS SOFTWARE		
SOFTWARE	**NUMBER**	**PERCENT**
Opus	40	32.52%
TBBS	25	20.32%
Fido	10	8.13%
RBBS	10	8.13%
Quick BBS	6	4.87%
Wildcat	6	4.87%
All Other	26	21.14%

COMMODORE BBS SOFTWARE		
SOFTWARE	**NUMBER**	**PERCENT**
C-Net	25	69.44%
BBS-PC	3	8.33%
All Other	8	22.22%

APPLE/MAC BBS SOFTWARE		
SOFTWARE	**NUMBER**	**PERCENT**
GBBS	17	56.66%
Protree	7	23.33%
Alpha III	2	6.66%
All Other	4	13.33%

ATARI BBS SOFTWARE		
SOFTWARE	**NUMBER**	**PERCENT**
Forem	5	38.46%
Carina	2	15.38%
Oasis	2	15.38%
Amis	2	15.38%
All Other	2	15.38%

Finally, we take a glimpse at supported transmission speeds. Roughly a third of local boards support **2400** bit-per-second (bps) operation although **1200** bps is still the most common. The **9600** bps category remains rare at **3.75%** of the local market. The accompanying table shows **HIGHEST** supported speed. As a general rule, a board supporting 2400 bps operation will also fall back to the slower 1200 and 300 bps speeds. However, some BBS do exclude **300** bps and a number of them will not allow file transfers at that speed due to time constraints.

MODEM SPEED		
HIGHEST	**NUMBER**	**PERCENT**
300 bps	13	5.42%
1200 bps	137	57.08%
2400 bps	81	33.75%
9600 bps	9	3.75%

LONG DISTANCE USA

ASHTON-TATE BBS

On-line aficionados who use the **dBase II or III** database program or the popular **Multimate Advantage** word processor are in for a special treat this month. **Ashton-Tate,** in a major policy reversal, has opened up their product support department dramatically. Among the changes: a totally open and totally free BBS. Anyone with a PC is welcome to use the service - it is **NOT** limited to registered users of Ashton-Tate products. The service provides free technical support and promises answers to posted technical questions within **24** hours. Sample/demo programs for various Ashton-Tate products are also available for download. The **ASHTON-TATE SUPPORT BBS** operates at **(213)538-6196** using the usual **8** data bits, **No** parity, and **1** stop bit **(8N1)** parameters. There are no access charges and no fees. Richard Goepel is manager of the product support center and apparently the mastermind behind this development. Significantly, the company also seems to have entered the archive utility competition - thus far the realm of shareware vendors such as System Enhancement Associates **(ARC521)** or Phil Katz **(PKARC).** The new entry is titled **FREE SPACE** and lists for **$69.95.** The program ostensibly allows normal DOS access to compressed files. Ashton-Tate, 20101 South Hamilton, Torrance, CA 90502;**(213)329-8000** (voice).

MICRORIM SUPPORT BBS

R:base 5000 and **System V** users will be happy to learn of a support BBS operated by **Microrim** at **(206)881-8119.** The board features a wealth of news concerning new releases and upgrades to their popular relational database product. Technical and programming questions are answered via the board's message areas and file areas contain a variety of utilities and programming examples. The board operates at speeds up to **2400** bps using **PC Board BBS** software and there is no charge for use of the board. Microrim Inc., 3925 159th Ave. NE, Redmond, WA 98052; **(206)885-2000.**

US VIDEOTEL

Although the United States is currently enjoying an explosion in on-line data services, it is somewhat less than a world leader in the field in many ways. France introduced small Minitel terminals into homes in place of printed telephone directories as early as **1982** allowing customers to look up numbers on-line. Nearly **5000** data services are now available to the **3 million** French customers via these terminals. Recently, a Houston firm known as **US Videotel** (USV) began marketing a videotext service using these same terminals manufactured by the French company **Tellc-Alcatel.** The units are rented for **$12.95** monthly and

US Videotel is the exclusive US distributor of the Minitel terminals.

The USV system features **30** data services from American Airlines, USA Today, Associated Press news service, and other information providers. A physicians referral service is available as well as restuarant and entertainment guides, sports, health, recipes, videogames, chat-line, electronic mail, and on-line stores. The company is currently striving mightily to forge links with Regional Bell Operating Companies (RBOCs) to provide videotext service on a fairly universal basis per Judge Greene's recent rulings on the RBOC role in providing information systems. That ruling allows RBOCs to carry information services but bars them from producing them.

USV differs from many current information providers in that they specifically target the home consumer market rather than business and government users.

The service uses a peculiar graphics protocol termed **ANTIOPE** devised by the French for their system. USV offers a software program for PC owners titled **Videotel PC Software,** priced at **$30,** allowing use of the system via a PC and modem without the minitel terminal. The USV service itself is **$6** hourly with an **$8** monthly minimum and the usual confusing array of subcharges for many of the services. US Videotel, 5555 San Selipe, Suite 1200, Houston, TX 77056;**(713)840-9777** (voice).

EXEC PC AVAILABLE VIA PC PURSUIT

Bob Mahoney's Shorewood Wisconsin BBS is one of the largest in the country and growing larger by the day. The BBS currently features 41 telephone lines, 20 subject conferences, 25000 files available for download, and **1.2 Gigabytes (1200 MB)** of storage. Over **5000** users pay a **$45** annual subscription to the board which is operated in the basement of Bob's home. Users from around the country call into the **(414)964-5150** number at a rate of **700** calls daily. Many use the popular **PC PURSUIT** service offered by Telenet which offers unlimited long distance dialing (data only) to **25** cities in the nation for a flat **$25** monthly fee. **PC PURSUIT** allows users in Houston, for example, to dial into Telenet and take control of one of the modems Telenet has in the **414** area code up in Wisconsin. The user would then dial out to the local telephone exchange to connect to **EXEC-PC.** The result is a local call in Houston and a local call in Shorewood with **PC PURSUIT** acting as the long-distance bridge. So many users have been using this service that it has become virtually impossible to get one of the area **414** modems at any reasonable hour. Mr. Mahoney has struck a deal with Telenet that is the envy of sysops everywhere. **PC PURSUIT** subscribers can now connect to **EXEC-PC** directly much as they would to Dow Jones/Compuserve/etc. Simply enter **CONNECT EXECPC,USER ID,PASSWORD.** This

places access to **EXEC-PC** on par with access to commercial services around the country. **EXEC-PC Inc.**, PO Box 11268, Shorewood, WI 53211; **(414)242-2173** (voice)

LEGAL EAGLES BBS
A number of professional groups have welcomed the coming of personal computers. Perhaps none more than the legal profession. The tendency toward small professional offices of two or three barristers and all the attendant billing and accounting functions make this quite understandable. Coupled with the need to quickly access the voluminous written case law resulting from a few hundred million people litigating over the last couple of centuries, this particular profession probably needed personal computers sixty or seventy years ago. If not already the case, the day will come soon when a lawyer without extensive computer skills or access to a good research service will need to seriously consider a career in house painting or light carpentry. And, the advantages of more casual communication via PC are not lost on this group either. The accompanying table of bulletin boards for lawyers is far from all inclusive. But as with all of our lists, it was verified within the last **30** days. Most of these boards cater to practicing lawyers and a few are run by law offices and local bar associations. Most will still allow the general public to log on and peruse the avail-

ables. With the current explosion in litigation, we've wondered if it would be possible to get one good male lawyer and a couple of female lawyerettes together to ah......start a law farm?

SHAREWARE NOTES

QUICK BBS RELEASED
Local shareware developer Adam Hudson announced the initial release of a new bulletin board system titled **Quick BBS** as of **December 16, 1987**. The new program is similar in speed and flexibility to Phil Becker's popular BBS program known as **The Bread Board System (TBBS)** which is sold commercially. Quick BBS is written in Turbo Pascal and features an extremely fast "hot key" interface experienced users will likely appreciate.
At least six local BBS have already made the conversion - most of them abandoning Wynn Wagner's **OPUS** BBS software in favor of the new program. Claude Warren, one such **OPUS** refugee and sysop of **PUBLIC PSYCHIATRY BBS (P2B2S) at (303)329-3337**, claims Quick BBS offers sysops enormous flexibility with endless menu/security combinations. He estimates total setup time at approximately eight hours. Apparently the program is catching on quickly. Gene Coppola of **QUICK BBS EAST 107/246** in New York is running the software and claims over **100**

BULLETIN BOARD SYSTEMS FOR LAWYERS

TITLE	TELEPHONE NUMBER	LOCATION
Call-A-Lawyer	(602)275-6644	Phoenix AZ
DePaul University Law School	(312)341-6217	Chicago IL
Dupage County Bar Association	(312)530-7667	Dupage IL
Free Form Node 3	(313)774-7258	Detroit MI
Frolic & Detour for Lawyers	(919)893-5206	North Carolina
LANS Multi-Node BBS	(219)884-9508	Gary IN
Lawboard	(805)273-8476	Palmdale CA
LawBoard Fido 11/102	(217)352-6118	Champaign IL
LawCAT Fido 14/999	(612)872-2352	Minneapolis MN
Lawyers Law Board Fido 152/16	(503)484-4344	Eugene OR
Law MUG	(312)661-1740	Chicago IL
Law Talk BBS	(513)721-4902	Cincinnati OH
Legal Connection	(516)933-8944	Hempstead NY
Hait & Wood Legal BBS	(916)894-0709	Chico CA
LEGIS Computer Consultants	(315)684-3113	Cazenovia NY
Texas Law Library	(512)463-1371	Austin TX
Lawyers On Line BBS	(808)244-4526	Maui HI
Montgomery County PA BBS	(215)272-0386	Allentown PA
Houston Northwest Bar Association	(713)440-5076	Houston TX

users have download the full package from his system.

Quick BBS supports file transfer via **ASCII, YMODEM, XMODEM, WXMODEM,** and **SEAlink** protocols, although author Hudson admits to some minor difficulties with the **SEAlink** protocol when used with some communications packages - particularly **GT Powercomm.**

In addition to blinding speed of operation, the software is also notoriously inexpensive with a suggested registration fee of **$25** - making the program effectively "freeware". When used with a mail handler front end such as **SEAdog** or **Binkley Term,** the system is **Fidonet** compatible and most of the local boards using the software are members of local net **104.**

Locally, the program is available via Hudson's support BBS **TURBO CONNECTION 104/24** at **(303)423-3114** or at Jonathan Wood's new **CYBER ZONE 104/61** at **(303)860-0126.** From the users end, we found the program title appropriate. Once some of the file transfer difficulties are ironed out, this program should be a winner.

AREA CODE LOCATOR

The shareware marketing concept has pretty much proven that a program does not have to be in the class of **dBase III+** to serve a useful function. And sometimes, it's the little things that can make life easier. One miniscule program we find useful is **AREA.ARC.** Once unarchived, the program consists of **AREA.EXE.** Quite simply, it tells you where an area code is located. To use it enter **AREA** and the code. For example **AREA 303** causes the response **COLORADO - ALL LOCATIONS.** Likewise **AREA 213** would render **LOS ANGELES CALIFORNIA.** This is quite handy when you find a telephone number of unknown origin. That's really all this little gem does - no documentation - no shareware announcements. It does indicate Marty Smith wrote the program in **1983.** Thanks Marty. Most users report they feel confident with the operation of this program in as little as 8 hours of intensive hands-on training. **AREA.ARC** is available for download locally from Jim Vorheis **INTERMITTENT CONNECTION 104/60** at **(303)797-0296.**

SPREADSHEET SHAREWARE

Trius Inc. brings us a notable winner in shareware software with a program titled **AsEasyAs Version 3.00.** The program can be found on many local BBS in the archived file **ASEASY30.ARC.** The file is slightly over **140** Kbytes in size and requires an archive utility such as **PKX35A35.EXE** or **ARC 5.21** to unarchive into the original program files.

The title **AsEasyAs** is an obvious word play on **"as easy as 1-2-3"** and the program lives up to its name. In short, it is a pretty well put together work-alike of

Lotus Development Corporation's popular spreadsheet **LOTUS 1-2-3.** It's not only as easy to use as the more famous product, it is almost identical in use, although somewhat limited in function. Even better, the resulting **WKS** files are file compatible with **Lotus 1-2-3.**

AsEasyAs Version 3.00 provides an excellent little spreadsheet limited to **1024** rows by **256** columns. Power accounting types will find this a bit restrictive but for most of us doing our taxes and an occasional plan for a redwood deck, even **1024 x 256** is overkill. The distribution files contain **NO** documentation. Fortunately, those familiar with **Lotus 1-2-3** operation will feel right at home with the slash command structure and the help screens are quite informative if occasionally mispelled. A printed manual is available to those who register the product at **$30.**

Other than the documentation, the program is surprisingly complete. It supports macros, printed and screen graph capabilities, database functions, extensive printer control, and a list of built in financial, statistical, and scientific functions quite comparable to those provided with its **$495** counterpart. It also offers a choice of command interface. Users can specify the /command menu so familiar from **Lotus 1-2-3** or an alternate set of pull-down menus that have become so popular on any number of commercial programs. We did not check to see if macros developed on **AsEasyAs** would run **100%** on Lotus and vice versa. It seemed a bit pointless since Lotus macros won't run on Lotus **100%** between the various versions.

Additionally, the program has a couple of advantages. Obviously it's not copy protected. Even better, the entire directory of **AsEasyAs** files with a couple of example spreadsheets was just over **250** Kbytes in size. This means you can tote the entire unarchived series of program files and some spreadsheet files around on a single diskette. Finally, the **$30** registration fee is a significant discount from the **$495** list price of **Lotus 1-2-3.**

Clearly, for power Lotus users this program cannot compete in size. But for the **90%** of us who use a spreadsheet occasionally for small business tasks or home budgeting, **AsEasyAs** offers plenty of power, more than enough functions, and a very compact package for a bargain basement price. And, you don't have to relearn a new command structure from scratch. Trius, Inc., 15 Atkinson St., Lynn, MA 01905. Available for download locally from **DENVER TECH CENTER BBS** at **(303)799-4813.**

SHAREWARE COPIES

All shareware programs reviewed in **Denver PC Boardwatch** are available for download from local area BBS at no charge. Electronic BBS are the primary distribution system for shareware software.

However, due to the lengthy connect-times required to download some large shareware programs, we have had a number of requests to supply copies of these programs via mail. To accomodate these requests, we are instituting a modest copy service for our readers. To order any program reviewed here, simply forward a diskette copy/postage fee of $7.50 to the address on the back page. Alternatively you may charge your order to Master Card or Visa by dialing (303)973-6038. Be sure and specify the desired program. We will send you a copy of the program on diskette via first class mail. Note that most shareware software requires an additional registration fee if you find the program useful.

EDITOR'S NOTES

This issue marks several exciting developments for **Denver PC Boardwatch Newsletter.** We are now available in over **50** front range computer retail stores at a cover price of $3 and sales are encouraging. In this issue we introduce a new BBS list format which lists the city where the BBS is located, the BBS software used, and name of the system operator. New additions to the list are highlighted in boldface type. We will continue to experiment with new list formats. Our coming February issue will list all boards sorted by telephone number rather than by title. Between the January and February issues, you should have a reasonably good cross-reference of the BBS available in Colorado as of early 1988.

This month we bring you a story we have followed since last April with the development of the **National Bureau of Standards Computer Access Time Service.** Our profound thanks to Dick Davis, David Allen, Marc Weiss, and Roger Beehler at NBS for their patience and detailed explanations of the service and of the many factors complicating the question of what time it really is. They provide a thoroughly fascinating and welcome service both to the Denver telecomputing community and to the nation.

We look for big things in **1988** from the Colorado telecomputing community. Sales of personal computers this past autumn exceeded all expectations and interest in communications has never been higher. Numerous national magazines such as **PC World** and **PC Magazine** have begun working our side of the street with extensive coverage of modem hardware, communications software, and online services in the past few months. And we look for this trend to not only continue but to accelerate. By the end of **1988,** we feel safe in saying that if you own a PC and don't have a modem, you'll be the proud owner of half a system. Communications will be the name of the game and the entire country will gradually move toward a national wide-area network. We hope the FCC shares this vision and backs off entirely from their ill considered proposal to end access charge exemptions for enhanced service providers such as Telenet and Tymnet.

We note a number of individuals who establish a publicly available bulletin board (a form of publication in our opinion), open up the lines, and advertise their new BBS on other BBS in the area issuing pleas for callers. As part of the logon process, they demand **"real"** names, addresses, telephone numbers, and sometimes ask fairly probing and pointless personal questions in their registrations as a condition for granting access - including, in some instances: employer, occupation, age, sexual preference, etc. Many of these questions would be illegal in all 50 states if used on an employment, credit, or housing application. In the very next breath, and with no apparent thought to the inequity of their positions, they insist on listing themselves as **SNOWPUPPY** or **MOONBUNNY** and express concerns for their "privacy". If you are going to run a "publication" such as an electronic bulletin board system and you are using that forum for nothing illegal or shameful, put your name and particulars on the title screen in large letters and let the world know who you are and why you run a BBS. We associate sysop aliases with virulent social maladjustment or puberty - doubly deadly in combination and often accompanied by pocket protectors and Pepsi cans.

Our reception among Colorado BBS system operators has been largely positive. But our obligations concerning editorial content remain wholly with our readers - by and large users of the services vice operators. We have received a few requests from sysops who would like us to remove items of information concerning their BBS and in some cases any mention of their BBS from our publication. While we appreciate any corrections of fact concerning our listings that we can confirm, we are under no obligation to delete listings of active boards or publicly available information. Information we find freely available on local BBS will find its way into these pages if it is interesting or noteworthy. As a general rule we do not go to extremes to "uncover" private boards and services and feel our readers have little interest in services they can't access freely anyway. At the same time, we strive to provide the most timely and accurate information available on the Colorado electronic village. At times, this seems somewhat like trying to talk a jello rattlesnake into gargling with Wesson oil. We're still trying to get a grip on it but it is just a bit slippery. Please bear with. Happy Telecomputing in the new year.
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Jack Rickard

DENVER PC BOARDWATCH

LIST OF AREA CODE 303 ELECTRONIC BULLETIN BOARD SYSTEMS AND ON-LINE SERVICES - JANUARY 1988

TITLE	PHONE	DESCRIPTION	TYPE	BPS	SOFT	CITY	SYSOP
Aces High	329-6579	Programming/General Messages	Apple	3/12	GBBS	Denver	Glenn Hayhurst
Adelante 104/93	443-8292	Central/Latin America Social Issues	IBM	3/12/24	Opus	Boulder	Zhahai Stewart
Aerie, The 104/40	623-7865	Science Fiction	IBM	3/12	Opus	Denver	Leland Dirks
Albuquerque Starport	494-7224		C-64	3/12	C-Net	Boulder	Greystoke Mindmaster
Alpha BBS / Intercomex	367-1935	Commodore Network Systems International		3/12/24	UNaXcess	Morrison	Robert Brumleyr
Alter-Net	449-7003	Enter ALPHA - /Ham Radio/Space Topics	???	3/12	UNaXcess	Boulder	Scott VanKirk
AmNet On-line	1-223-1297	On-Line Games - Boardgame Sales	???	3/12	TBBS	Ft. Collins	James Cherry
Apple Orchard North	1-380-0605	Animal Rights Issues	IBM	3	GBBS	Colorado Springs	David Gabel
Apple Pi A La Modem	427-7114	Upload/Download	Apple	3/12	GBBS	Broomfield	Robert Racansky
APSNet	693-6737	Apple User Group Messages/Downloads	Apple	3/12	GBBS	Aurora	Columbia Middle School
Arkham Public Library 104/48	444-7686	Aurora Public Schools Network	IBM	3/12/24	Opus	Boulder	Neil Beaty
Aurora Multi-System	745-3414	Tradewars Game/IBM Software 6PM-8AM	Amiga	3/12/24	BBS-PC	Aurora	Greg Kanis
Aurora Net	680-9292	Amiga/Atari/IBM/Apple/Commodore	Apple	3/12/24	Protree	Aurora	Ken Scrogan
Bill's Place	1-392-3417	Protree Prime/Elite Support Board	IBM	3/12	TCOMM	Colorado Springs	Bill Taylor
Bit Bucket, The	790-7024	Music/Video Reviews - Weather - Tandy	IBM	3/12	Wildcat	Aurora	Ed Hamm
Blue Bear Group	825-1324	Uses Wildcat BBS Software	Northstar	3-96	DMA	Denver	Eduward Bee
Blue Planet	979-7299	National Electronic Mail System	Tandy2000	3	???	Littleton	Tom Nielson
Boulder MAC Maniacs 104/49	530-9544	Space Wars Game	MAC	3/12	GBBS	Louisville	Ed Fenner
Boulder Public Library System	444-2057	Apple Macintosh Messages and Files	Tandem	3/12	Custom	Boulder	Eyring Research
Boulder Public Library System	444-2074	Library Research	Tandem	12	Custom	Boulder	Eyring Research
Box's Cabin, The	424-9185	On-Line Card Catalog - Member C.A.R.L	Apple	3/12/24	Protree	Arvada	Kent Roberts
Broomfield Tech Center	460-0556	Apple / Technical Notes	IBM	3/12	Wildcat	Broomfield	Kirk Stevens
Buck Board, The	425-9283	Computer Pros, AI Files, Consult 6PM-8AM	TRS	3/12	TBBS	Westminster	Lee Castens
C.A.C.H.E	745-4960	Veterans messages, TRS-80, Amiga	Apple	3/12/24	GBBS	Denver	???
C.A.R.L Colorado Springs	1-632-2194	CO Apple & Compatible Home Enthusiasts	??	3/12	Custom	Colorado Springs	N/A
C.A.R.L Denver	830-0519	Penrose Library	Mainframe	.24	Custom	Denver	N/A
C.A.R.L Denver	830-1165	Colorado Association Research Libraries	Mainframe	.3	Custom	Denver	N/A
C.A.R.L Denver	830-1546	Colorado Association Research Libraries	Mainframe	3/12	Custom	Denver	N/A
C.A.R.L Denver	830-1547	Colorado Association Research Libraries	Mainframe	3/12	Custom	Denver	N/A
C.A.R.L Denver	830-1548	Colorado Association Research Libraries	Mainframe	3/12	Custom	Denver	N/A
C.D. Players	825-0419	Computer Discount On-line Store/Amiga	Amiga	3/12/24	TBBS	Denver	Tony Scott
Cable Net Opus	987-9168	IBM Communications Shareware Downloads	IBM	3/12	Opus	Lakewood	Ted Gilmore
CAMSUG 128/26	1-554-4279	INFO NEEDED	IBM	3/12/24	Opus	Colorado Spring	Dave Walker
Career Connection/DRUG	671-0801	Job/Resume/Denver Rainbow Users 7PM-7AM	DEC100	3/12	Fido	Aurora	Jim Turner
Cat's Lair	1-382-8646	Commodore BBS with Feline Bent	C-64	3/12	C-Net	Colorado Springs	???
Catspaw SNOBOL4/ICON 15/22	1-539-4830	SNOBOL/ICON Programming Languages	IBM	3/12/24	Fido	Salida	Mark Emmer
CBA Information System	329-0159	Continental Basketball Association	IBM	3/12	TBBS	Denver	???
Charlot Communications	1-632-4111	Subscriber Only - Unix - NAPLPS Graphics	IBM	3/12	Unix	Colorado Springs	Hughes/Jaffe
Christian Protocol	693-8791	Christian Messages - Bible Text	IBM	3/12/24	TBBS	Denver	Ken Johansen
Club House, The	756-9134	RF Games - Golf Format - Messages	Apple	3/12	GBBS	Denver	Pinsetter
Club Micro 104/88	832-5850	IBM Communications/Database/Communication Files	IBM	3-96	Opus	Denver	Don Marquart
Coco County Airport 104/54	343-6707	TRS Color Computer Support	IBM	3/12/24	Opus	Aurora	Ron Bihler
Code 5150	696-6673	Lunatic Discussions / Crazy People	Apple	3/12/24	GBBS	Aurora	Chris Thilges
Collie, The	1-260-9724	General Software Downloads	IBM	3/12/24	Collie	Colorado Springs	Ralph Whittaker
Colorado Broadcasters 104/42	572-6256	Commercial Radio Frequency Lists	IBM	3/12	Opus	Denver	Lynn Osbum
Colorado Commodore Club BBS	452-0544	Commodore Computer Info	C-64	3/12	C-Net	Northglenn	???
Colorado FireNet Fido 128/16	1-591-7415	Colorado Springs Fire/Safety	IBM	3/12	Opus	Colorado Springs	???
Colorado TravelBank	671-7669	Colorado Travel, Recreation, Ski Info	IBM	3/12/24	TBBS	Denver	Jay Melnick
Colorado University	447-2540	University Mainframes (Require Access)	Mainframe	3/12	Custom	Boulder	N/A
Comm-Net Information Service	340-2473	"C-64/C-128/Amiga Info-Dnlds-Messages	C-64	3/12	Custom	Aurora	Tele-Net Inc.
Comm-Net Information Service	366-2341	"Excellent Info for Commodore Products"	C-64	3/12	Custom	Aurora	Tele-Net Inc.
Comm-Net Information Service	366-2744	* C-64/C-128/Amiga Info-Dnlds-Messages *	C-64	3/12	Custom	Aurora	Tele-Net Inc.
Comm-Net Information Service	366-3898	* Service Jokes/Weather/Sports/Database *	C-64	3/12	Custom	Aurora	Tele-Net Inc.
Comm-Net Information Service	366-7177	* C-64/C-128/Amiga Info-Dnlds-Messages	C-64	3/12	Custom	Aurora	Tele-Net Inc.
Comm-Post, The	534-4646	Astronomy, TI-PC, Tandy 1000/2000, Jokes	IBM	3/12/24	TBBS	Denver	Brian Bartee
Commodore Club 128/29	1-392-0830	Commodore Club of Colorado Springs BBS	IBM	3/12	Opus	Colorado Spring	Mark West

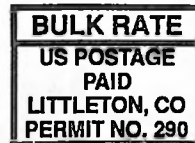| BBS Name	Phone	Description	Computer	Baud	Software	City	Sysop
Commstar Enterprise	1-597-8670	Commodore 64 with Tesseract Drive	C-64	3/12	C-Net	Colorado Springs	Fred Forrest
Communication Companion 128/12	1-685-4333	Manitou Springs - Gourmet Recipes	IBM	3/12	TBBS	Manitou Springs	Scott Miller
Computer Farm 128/20	1-632-0669	FCC Echo IBM Hardware/Software Sales	CP/M	3/12/24	Fido	Elbert	Paul Hill
Computer Know How	279-0224	Hard Disk Installation / Tech Support	CP/M	3/12	ZBYE	Golden	John Holmgren
Computer Repeats Inc.	939-8174	Used Atari Equipment Sales	Atari	3/12	Forem	Boulder	???
Computers Unlimited	762-9122	Sanyo MBC-55X Support	IBM	3/12	Fido	Englewood	Jack Campbell
Control Headquarters	1-472-0902	Maxwell Smart/Agent 99 - Games	C-128	3/12	C-Net	Colorado Springs	???
Control Point 104/711	526-9642	"Excellent" PC Software Download Files	IBM	3/12/24	Opus	Golden	John Maxwell
Control Systems	458-6248	IBM/Compatibles Subscription Board	IBM	3-96	RBBS	Denver	Tom Parker/Bill Wills
Controller Board/TBBS Island	690-9423	Computer Supplies - Online Sales	TRS	3/12	TBBS	Aurora	Mike Hastings
COSUG 128/13	1-531-9674	Colorado Springs PC Users Group 140 MB	IBM	3/12/24	Opus	Colorado Springs	Jim Cannell
Council of Whitestone 104/46	699-0326	D&D - Jokes - Tradewars - Chess - QBBS	IBM	3/12	QuickBBS	Aurora	Dax Davis
CP/M SIG INC 104/372	465-1313	Oldest User's Group in Area - CP/M - IBM	IBM	3/12/24	Fido	Broomfield	Al Lundquist
Crossroads	499-0457	Discussion	TRS	3/12	TBBS	Lakewood	Mark Bradford
Crossroads	989-8397	Discussion	TRS	3/12	TBBS	Lakewood	Mark Bradford
CS BBS Service 128/11	1-531-6668	Heath Zenith Echo Conference	IBM	3/12/24	Opus	Colorado Springs	Richard Evers
CSM-SPE Oil Patch 104/59	273-3239	CSM Petroleum Engineering Department	IBM	3/12/24	Opus	Golden	Max Bordelon
Custom HUB	1-598-4500	Rudest BBS in the West	IBM	3/12/24	HUB	Colorado Springs	Thom Foulks
Cyber-Zone, The 104/61	860-0126	Science Fiction	IBM	3/12/24	QuickBBS	Denver	Jonathan Wood
Daily Planet	286-8701	Commodore BBS	C-128	3	C-Net	Denver	Rugger
Day's End 104/20	650-5636	Downloads - Messages - Astronomy	IBM	3/12/24	Opus	Denver	Chris Day
Death Star, The	781-6863	Fun Posting 8PM-6AM	C-64	3/12	C-Net	Henderson	Earl Miles
DekBBS	1-635-3732	Dek Research Company - CP/M Files	??	3/12	TBBS	Colorado Springs	???
Dementia	989-8470	American MENSA Denver Chapter	Apple	3/12	GBBS	Denver	Chuck Pelto
Den HUG	331-0982	Denver Heath/Zenith User Group	Heath	3/12	PBBS	Wheatridge	Larry Means
Denver Deaf-Net	989-9245	Hearing Impaired/Computing	Apple	3/12	Protree	Lakewood	David Sheneman
Denver Metroplex 104/69	455-3283	Autocad/Computer/Sexual Boards	Kaypro	3/12/24	Fido	Denver	Terry Travis
Denver Tech Center	799-4813	Megafiles of Downloads / On-line Chess	IBM	3-96	PC Board	Englewood	Bill Cronister
Design Tech 128/28	1-578-8221	Printing/Design/Advertising Services	IBM	3/12	Opus	Colorado Spring	Charles Presley
Dialamatch 118/The Brokerage	796-9721	Adult Matchmaking	Franklin	3/12	DYM	Englewood	Bob Simpson
Dilligal	1-593-2232	D)oes I)t L)ook L)ike I) G)ive A) F)XXX	??	3/12	???	Colorado Springs	Al Audet
Dinosaur Board	1-652-3595	Outdated Computer Support/Zork I On-Line	TRS	3/12	TBBS	Niwot	Chris Anderson
Discovery, The	388-5437	Music / General Messages	Apple	3/12	Alphall	Denver	???
DJ	789-0500	Galactic Conquest Game On-line 40 MB	Apple	3-96	GBBS	Englewood	David Metzel
Dragon's Shadow	841-3721	Fantasy / Games - Unique Logon Screen	C-64	3	C-Net	Parker	???
Eagle's Nest	933-0701	Minihost Board 7PM-10PM	IBM	3/12	Minihost	Littleton	Ronald Olsen
Eagles Nest 128/18	1-598-8413	Eagleview Middle School	IBM	3/12/24	Opus	Colorado Springs	Richard Evers
Education 2000 104/29	449-9807	Education Issues Kindergarten - 12th	IBM	3/12	TBBS	Boulder	Roger Salamen
Electronic Locksmith 128/22	1-392-2906	Rick's Locksmith Service - Security CO	IBM	3/12	Opus	Security	Rick Ayers
Elkridge West	1-488-2671	TCOMM BBS with 144 MB of Files	IBM	3/12/24	TCOMM	Colorado Springs	Bob Staggers
Enchanted Castle	1-769-1880	INFO NEEDED			???		???
Enterprise	320-6470	Commodore Board with 3.6 MB Software	C-64	3/12	C-Net	Denver	Mr. Spock
Epoch 2000 128/21	1-531-6172	Weston Computing Observatory - Astronomy	IBM	3/12/24	Opus	Colorado Springs	Phil Somers
eSoft Support	699-8222	eSoft Inc. TBBS Software Support	IBM	3/12	TBBS	Aurora	Phil Becker
ETA Denver 104/32	750-5042	ANSI, Messages, Weather Forecast, Dnlds	IBM	3/12/24	QuickBBS	Aurora	Rick Christensen
Eusebeia 104/18	430-8376	Christian - Full KJV Bible Downloads	IBM	3/12/24	TBBS	Denver	Jim Queisner
Excalibur 104/39	497-6051	C Program Files - C Echo Area 5PM-8AM	IBM	3/12/24	Opus	Boulder	Steve Roughton
Excelcier	697-1244	Apple/Commodore Message Areas	Apple	3/12	Protree	Morrison	Brandon Hieb
Experience Software	798-0792	Franklin Messages	Franklin	3	Network	Littleton	Experience Software
Fantasy Mountain PBBS	278-3369	Deaf and Handicapped Issues ASCII TTY	CP/M	3/12/24	PBBS	Golden	Steve Shockley
FAWG MASES 128/25	1-633-9277	Fantasy and War Games - Star Trek Online	IBM	3/12	Opus	Colorado Springs	Chet Phelps
Fido NBS 104/607	497-3934	National Bureau Standards - Jobs SIG	IBM	3/12/24	Fido	Boulder	Cathy Nixolleti
FOG-45	1-597-2743	Colorado Springs First Osborne Group21MB	Osborne	3/12	RBBS	Colorado Springs	Kathy Bylkas
Four Wheeling BBS, The	469-4954	Jeeping / Camping / Outdoors	Atari	3/12	Forem	Broomfield	John Ferguson
FutureWave BBS 104/57	444-1116	Games/C Language/MIDI 6PM-7AM	IBM	12/24	Opus	Boulder	Ross Sponholtz
GateKeeper, The	755-4210	Gateway High School	Apple	3/12	GBBS	Aurora	???
Gay Community 104/19	795-1215	Messages / Downloads for Homosexuals	IBM	3/12	Opus	Littleton	Steve Raymond
Genesis Project	287-8267	Apple II General	Apple	3/12/24	Protree	Commerce City	Gene Humbert
GLOBAL Information	286-7914	Fee Subscription / Software Database	VAX	3/12	Custom	Denver	Jim Comstock
Greater Clifton PCBoard	1-241-1966	Grand Junction MUG - Ham/Packet Radio	IBM	3/12	PC Board	Grand Junction	MUG of Grand
Greeley-Com-Net	1-351-8861	Modem Users Board	Apple	3/12/24	GBBS	Greeley	Lowell Shatraw
Greenline	469-2053	Amiga Messages and Downloads	Amiga	3/12	BBS-PC	Broomfield	Phil Green
Greeter Hub	1-473-3837	Colorado Springs HUB BBS Software Board	IBM	3/12/24	HUB	Colorado Springs	Ted Statler
Grizzly King	666-0824	Freeware/Colorado Outdoors/Programmers	IBM	3/12	TBBS	Lafayette	Bob McDuffee
Grotto, The	694-9050	Amiga, Pascal - Ebert Personal Computers	IBM	3/12/24	TBBS	Aurora	Vincent Veritas

LIST OF AREA CODE 303 ELECTRONIC BULLETIN BOARD SYSTEMS AND ON-LINE SERVICES - JANUARY 1988

TITLE	PHONE	DESCRIPTION	TYPE	BPS	SOFT	CITY	SYSOP
Hack Shack	688-8406	Commodore	C-64	3/12	C-Net	Castle Rock	???
Hangmans House	499-4818	Commodore Games	C-64	3/12	C-Net	Boulder	???
HenJan BBS	469-4315	German/Span/Port Translations 9P-6A	IBM	.12	GT Power	Broomfield	Henrique/Jane Barreto
HIP Shack 128/19	1-495-2061	Amateur Radio - Packet - Short Wave	IBM	3/12/24	Opus	Colorado Springs	Bdale Garbee
Hollows, The	428-0372	Smoke Signal Software/PRIME BBS Support	Apple	3/12	Protree	Denver	Vince Cooper
Home Base	1-635-1472	Adult Sections	IBM	3/12	Wildcat	Colorado Springs	Robert Fallon
HP-BBS 104/34	1-229-9719	Jokes, Amazing but True stories,	HP-Vectra	3/12	TBBS	Fort Collins	Rob Diehl
HQ AFSPACECOM	1-554-4490	Air Force Space Command Pubs 5PM-7AM	IBM	3/12/24	Wildcat	Colorado Springs	Brian Pallozzi
Ice Palace	494-4934	Commodore Board with Chilly Theme	C-64	3	C-Net	Boulder	Snowbird
Iguana's Den, The	771-5937	Kiddie Board - Filthy Language	IBM	3/12	ForumPC	Englewood	KIPMOP
In To The Night 104/31	659-1897	IBM Game Files 9PM-3AM	IBM	3/12	Opus	Fort Lupton	Kris White
Intermittent Connection 104/60	797-0296	General Messages/Download	IBM	.12	QuickBBS	Littleton	Jim Vorhels
Investment Lounge	759-3721	Excellent Investment/Financial Topics	IBM	3/12	TBBS	Aurora	Mark Greve
Investors BBS Service	1-481-4525	Stocks and Investments	IBM	3/12	RBBS	Monument	Richard Dixon
Irving Library Network	444-2115	On-Line Card Catalog	??	.12	???	Boulder	N/A
Isle of Man	447-1942	Gay Community BBS	IBM	3/12	RBBS	Boulder	???
Isle of Melnibone	642-0968	Commodore board	C-128	3	C-Net	Boulder	ELRIC
King's Market Bookshop	665-6091	Books, Writers, On-line Adventure Games	TRS80	3/12	TBBS	Boulder	Jim Burt
Kings Bench 104/615	377-6725	Tandy 1000 ONLY/$2 Registration/Messages	TANDY1000	3/12/24	Fido	Denver	Ralph Allison
L&L Support	420-3568	Primary GBBS Pro Software Support BBS	Apple	3/12/24	GBBS	Arvada	Lance Taylor-Warren
Laboratory BBS/SUPERTAC	287-5274	Commodore with Laboratory theme	C-64	3/12	???	Denver	Professor Beaker
Lakewood Department of Safety	987-2094	Police Sponsored - Law Enforcement Msgs	IBM	3/12	RBBS	Wheatridge	Larry Scheideman
Land of Linden	987-2094	Fantasy Runequest Games	Apple	3/12	AlphaIII	Lakewood	???
LES-COM-NET	233-5824	Lesley College Communications Network	Apple	3/12	GBBS	Lakewood	Lesley College
Lodge, The	420-0305	Arvada RBBS Board - Needs Uploads	IBM	.12	RBBS	Arvada	Harold "Monty" Montrose
Looking Glass	1-591-6315	Dungeons and Dragons / Dr. Who RP Games	C-64	3/12	C-Net	Colorado Springs	Jon Hunt
Manville Info Services 104/978	978-3946	Business Software / Apple Macintosh	IBM	3/12	Fido	Littleton	???
Master Work, The 104/55	341-6614	Recently Up - General Communications	IBM	12/24	Opus	Aurora	Roy Prickett
Maverick	1-434-4211	Hardware Sales - $10 Annual Fee	IBM	3/12/24	RBBS	Grand Junction	David Fouts
MED Link 104/444	443-4353	Medical Info/ TI 99/4A / MS-DOS	IBM	3/12/24	Fido	Boulder	Ron Kuseski
Message Center	1-471-3783	Adult Theme / Swap Shop For Sale Area	IBM	3/12	Collie	Colorado Springs	Michael
Metamorphasis	1-772-7229	Rocky Mountain AT&T Users Group 260 MB	IBM	3/12/24	PC Board	Lafayette	Tony Ferris
Micro World Infomat	987-2671	RBBS-IBM-Commodore-Amiga-Atari 7PM-8AM	IBM	3/12	RBBS	Lakewood	Leonard Vandermate
Microlink B 104/108	972-9600	Excellent IBM Software Download Library	IBM	3/12/24	TBBS	Littleton	Girard Westerberg
Microlink C 104/53	455-4793	Professional Computer Sales Co.	IBM	3/12/24	TBBS	Denver	John Anderson
Mile Hi Tech Fidonet 104/56	973-9338	Fido Area Coordinator - Fido News/List	IBM	3/12/24	TBBS	Littleton	Oscar Barlow
Mile High Epson User Group BBS	752-2943	MHEUG Club Board	EPSON	3/12/24	Forem	Aurora	Dale Bucknam
Mile High Forem	431-1404	Outstanding Atari ST Database - HST 9600	Atari	3-96	Forem	Arvada	???
Mile High Mac Meet	758-9159	Denver Macintosh Users Group	MAC	3-96	WWIV	Denver	Jon Taylor
Mile High Net	671-7308	Fido Board	IBM	3/12/24	Fido	Aurora	Dave Miller
Minds of Mines (MOM) BBS	273-3989	CSM Artificial Intelligence/Geotechnical	IBM	3/12/24	Tigger	Golden	Joe Applegate
Motherboard	1-241-1419	Grand Junction - Good Software PC BOARD	IBM	3/12/24	PC Board	Grand Junction	Jennifer Dillon
Mountain Amiga Enthusiasts	1-564-0618	Pueblo Amiga Computer BBS	Amiga	3/12	BBS-PC	Pueblo	Jim Reyna
Musician's Den 104/17	937-9569	Music Interests - MIDI Tech. 7PM-9AM	IBM	3/12	Opus	Denver	Andy Velasquez
Mycroft	777-8898	Horizon Computer/National Atari BBS List	Atari	3/12	TODAMIS	Denver	Phil Michaelson
Necromancer	1-550-9893	C Springs Tourist Spots - Online Chess	IBM	3/12/24	Wildcat	Colorado Springs	Dan Braun
Networks Unlimited	296-3210	IBM/Amiga - 60 MB of Downloads	IBM	3/12/24	ForumPC	Denver	Magic Man
No Name BBS	988-5765	Language Translations	IBM	3/12	Minihost	Lakewood	Jon Johnson
Nunnery, The	467-1240	Foul Language - C-64 BBS List	C-64	3/12	C-Net	Arvada	The Nun
Nurse Link 104/52	270-4936	UCHSC School of Nursing	IBM	3/12/24	TBBS	Littleton	Chuck Mastrini
Odyssey III	691-0169	Adult(18) / Sex Oriented/Members 5PM-8AM	Apple	3/12	GBBS	Denver	Sundance
Old Colorado City/Roger's Bar	1-632-3391	Rodgers Bar - Politics - NAPLPS Graphics	IBM	3/12	Unix	Colorado Springs	Hughes/Jaffe
On-Line Consulting 104/45	449-5251	Consultant Directory/Desktop Publishing	IBM	3/12/24	Opus	Drake	Lee Lasson
On-Line Shopping Service	442-5125	Boulder Home Grocery Delivery $5 + 5%	IBM	3/12	Custom	Boulder	Pete Dempsey
Optotech Inc 15/16	1-570-7973	400 Meg Optical Disk Drive Manufacturer	IBM	.12	Fido	Colorado Springs	Richard Green
P*P CompAS	1-591-1453	Pikes Peak Computer Applications Society	IBM	3/12/24	TBBS	Colorado Springs	Charlie Kunz

BBS Name	Phone	Description	Computer	Baud	Software	City	Sysop
P2B2 S 104/51	329-3337	Public Psychiatry / AI Themes 6PM-8AM	IBM	3/12/24	QuickBBS	Denver	Claude Warren
Pazzulzo's Palace	**934-1829**	**Commodore Board**	C-64	3/12	**C-Net**	**Denver**	**Forufo Pazzulzo**
PC Computer Brokers	465-3729	IBM, Epson Equity, TRS-80 Club Msgs	IBM	3/12	RBBS		Terry Connolly
PCjr-NET 104/904	789-4610	IBM PC Jr. Technical Info /Radio Comm	IBM	3/12/24	Opus	Englewood	Phil Kaiser
PCR HUB	1-635-8808	Online Novel - Not Bad!	IBM	3/12/24	HUB	Colorado Springs	???
Phasar	745-4305	Teen Conversation - Advice Column	C-128	3/12	C-Net	Aurora	Roy Rush
Phoenix TBBS 104/739	841-9570	4 Lines - Online Chat/CB, INFO-MAT Magaz	IBM	3/12/24	TBBS	Parker	Larry Kayser
Phone Connection	426-7969	Commodore	C-64	3/12	C-Net	Westminster	The Lineman
Photo Tech	781-1079	TRS 80 / HAM / Video / Camera	TRS	3/12/24	TBBS	Englewood	Jim Gemtz
Pinecliffe 104/28	444-7073	170 Meg - Online Order for CDB Systems	IBM	3/12/24	Opus	Boulder	Craig Baker
Playhouse	286-7399	Adult / Jokes / Sexual Themes	Apple	3/12	Protree	Denver	???
Predacon	988-6886	Atari 8 bit / ST with 10 MB	Atari	3/12	Carina	Lakewood	Brad Baumbach
Pro-Cyber Perimeters	721-6667	Online Games - Trivia Quiz - 20 MB	Atari	3/12	Carina	Englewood	The Subjugator
Professional System, The	740-2223	Writers, Lawyers, EDP Auditors	IBM	3/12	TBBS	Littleton	Bob Voorhees
Prom Blaster	422-3759	Apple Conversation	Apple	3	GBBS	Arvada	???
PSINet	985-2634	Parapsychology / Near Death Experiences	TRS	3/12	TBBS	Denver	William Tedder
Publishing Resources Inc.	442-2011	Laser Printing/Publishing/Linotronic	MAC	3/12	RedRyder	Boulder	???
R.A.B.B.I.T.	757-9509	Colorado Highway Department - Planning	IBM	3/12	TBBS	Denver	Colorado Dept. Highways
Radscan	**1-675-3214**	**Enter RADSCAN as password**	**PDP-11/45**	**3/12**	**RSTS9.4**	**Rangely**	**John Henderson**
Radscan	1-675-3225	Rangely PDP11 BBS Multiline - Games	PDP-11/45	3/12	RSTS9.4	Rangely	John Henderson
Radscan	1-675-3326	Password RADSCAN -	PDP-11/45	3/12	RSTS9.4	Rangely	John Henderson
Ramnet 128/14	1-594-9476	Rampart High School	IBM	3/12	Opus		Chuck Auck
Realm, The	937-0215	Royal Theme - Complete with King	C-64	3	C-Net	Denver	???
Regency Datasource 104/58	972-1222	Private Computer Consulting Support	IBM	24	Opus	Littleton	Charlie Bass
Rivendell 128/17	1-472-0745	Air Academy High School	IBM	3/12/24	Opus	Colorado Springs	Mike Eamon
Roach Motel	697-1225	Commodore 7E2	C-128	3/12	C-Net	Morrison	Bob Naple
Rocky Mountain 99ers	288-3692	Texas Instruments 994A 7E2	TI99	3/12	???	Denver	Mark Payne
Rocky Mountain RBBS	750-2107	INFO NEEDED	??	3/12	RBBS	Aurora	Steve Komreich
Ron and Shannons BBS	978-0298	Atari Support 5.4 MB	Atari	3/12/24	AMIS	Englewood	Ron/Shannon Sellers
Running Board	252-4051	Transportation / Atari	Atari	3/12/24	Oasis	Northglenn	Chris Hess/Ed Fason
Shepherds Bush 104/77	497-6968	IBM Technical - Utilities	IBM	3-96	Opus	Boulder	Kent Leonard
Skyline Computers	457-0320	Good Atari News, Files, etc.	Atari	3/12/24	Oasis	Denver	Dave Lloyd
Smart-Net 128/23	1-578-9406	Dungeons & Dragons Games	Atari	3/12/24	???	Colorado Springs	Tom Johnson
Softech	429-4408	Commodore Bored	C-64	3/12	C-Net	Westminster	???
Solid Software Fidonet 128/15	1-591-4273	Heath Zenith 50 MB - Geneology	IBM	3/12/24	Opus	Colorado Springs	Joe Rock
Space Environment Service Cntr	497-5000	NOAA Solar Flare Forecast/Advisory	IBM	3/12	PBBS	Boulder	US Dept of Commerce
Space Network	494-8446	Space Exploration Information	IBM	3/12/24	Opus	Boulder	Tom Meyer
Spam Mania	423-0348	Areas Longest Most Idiotic Logon Message	C-64	3/12	C-Net	Arvada	Spam-Master
Springs Net	1-634-6077	Atari Messages and Downloads 7PM-11PM	ATARI	3/12	BBCS	Colorado Springs	James Urban
Stampede	799-9733	Atari/Amiga Messages/Downloads 6PM-10AM	Atari	3/12/24	Forem	Englewood	The Computer Room
StarInc	**494-5772**	**Star Trek Fan Messages - Next Generation**	**C-128**	**3/12**	**C-Net**	**Boulder**	**Kirk Peterson**
Steamboat Information	1-879-6741	Info on Steamboat Springs Area	IBM	3/12	TBBS	Steamboat Springs	???
Sun Country RBBS	**1-544-7102**	**Pueblo Telecommunications User Group**	**IBM**	**3/12**	**RBBS**	**Pueblo**	**John St. Clair**
Superguild 64	1-473-5739	Commodore	C-64	3/12	C-Net	Colorado Springs	Mike Simshouser
TBBS Net 104/23	699-9248	The B)read B)oard S)ystem Support	IBM	3/12/24	TBBS	Aurora	Phil Becker/eSoft Inc.
Temple of Doom	771-9523	INFO NEEDED	??	3/12	???	Englewood	???
Terus Public BBS 104/43	469-7161	MINDS AI TextBase Indexer Support	IBM	3-96	Opus	Broomfield	Todd Hill
The 8th Sea 104/610	252-9235	Scuba/Rescue/Wiccan - Great IBM Software	IBM	3/12/24	Opus	Northglenn	Rod Lamping
This End Up 104/30	430-1585	Denver PC Boardwatch Msgs 10PM-10AM	IBM	3/12	Opus	Westminster	Steve Carnes
Timberline 128/27	1-380-0257	Ski Conditions - Adult File Areas	IBM	3/12	Opus	???	Dan Smith
Treasure Island	980-8031	Commodore BBS	C-64	3	C-Net	Lakewood	Terminator
Trekker World	745-9530	Star Trek Fanzine 7AM-10PM	Apple	3	GBBS	Aurora	Robert Morgan
Turbo Connection 104/24	423-3114	Quick BBS Software Support Board	IBM	3/12	QuickBBS	Arvada	Adam Hudson
University Southern Colorado	1-549-2069	Pueblo Telecommunications Users Group	IBM	3/12	Fido	Pueblo	Chuck Briggs
Vern's Terminal Exchange	433-1150	Commodore Messages/Downloads/Ads	C-64	3/12	Ivory	Denver	???
Villa TI	1-574-2567	Front Range 99er Computer Club	TI	3/12	Techie	Colorado Springs	Joe Nuvolini
Vine, The	1-596-1216	Excellent On-Line Bible Trivia Game	IBM	3/12	HUB	Colorado Springs	Ron May
Waterton Computer Club	977-7096	Martin Marietta Employees - 5PM-7AM	IBM	3/12/24	RBBS	Denver	Ken Beaudrie
White Runes of Tinuviel	972-8566	Tolkien Subjects/Dungeons and Dragons	Atari	3/12	STadel	Littleton	Andy Strasheim
WILDCAT! Orphanage Interntl.	1-392-6631	Talknet Online Newsletter - Caller Stats	IBM	3/12	Wildcat	Colorado Springs	Bob Conners
Wingnut Opus 128/24	1-570-9980	Theology Echo - Medical	Heath	3/12/24	Opus	Colorado Springs	Dave Arementrout
World Peace PBBS	320-4822	Current Events, Politics, RCP/M	IBM	3/12/24	PBBS	Denver	Bucky Carr
ZAPI	367-4103	Atari/ST/8 Bit	Atari	3/12	Forem	Aurora	???

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